

Moody, Jonathan

From: Mariuzza, Kristen (EAGLE) <Kristen.Mariuzza@lundinmining.com>
Sent: Wednesday, December 18, 2013 10:00 AM
To: Moody, Jonathan
Cc: Maraldo, Dean; Cantello, Nicole
Subject: Humboldt Pit Monitoring - CWA Section 308(a) Request for Information
Attachments: HTDF_Piezometer_Location.pdf

Dear Mr. Moody,

The purpose of this e-mail correspondence is to inform you of some changes in the storm water management and monitoring activities at the Eagle Mine, LLC (Eagle), Humboldt Mill facility in Humboldt Township, Marquette County, Michigan, that are the subject of the above-referenced request. These changes are being made in response to the onset of winter weather at the site.

With the recent onset of freezing conditions at the site, Eagle intends to modify the nature of its storm water discharge from the HTDF from intermittent during normal working hours to continuous (i.e., 7 days/week, 24 hours per day). This change, which will continue for the remainder of the winter, will limit the potential for ice build-up in the wetland and in culverts draining the wetland during the winter. It will also allow us to draw the pit elevation down further to accommodate the higher volumes of storm water observed during spring rain/snow melt in anticipation of commissioning and initiation of mill operations in 2014.

The onset of freezing conditions has also caused Eagle to modify the methods currently in use for measurement of the HTDF surface water elevation. As you may recall, Eagle had been measuring the surface water elevation in the HTDF using a staff gauge. Due to the formation of surface ice on the HTDF, Eagle has constructed a piezometer immediately adjacent to the HTDF and is measuring the water elevation in this location in order to track the HTDF elevation through the winter. The location of this monitoring well is presented on the enclosed figure. Because of its proximity to the HTDF, the elevation of groundwater in this piezometer is equivalent to the elevation of water in the HTDF and the piezometer is not subject to freezing. It is our intent to measure/report water elevations using this, or a similarly situated, piezometer throughout the winter and resume direct measurement of HTDF surface water elevations using a staff gauge or similar instrument when the surface ice on the HTDF melts in the spring.

Eagle is requesting relief from the obligation to measure and report the HTDF water elevation on a daily basis. As you may have noted from review of our monthly reports, the water elevation in the HTDF changes very slowly in response to pumping of storm water due to the large volume of water contained in this unit. In acknowledgement, we are proposing to measure and report the HTDF water elevation on a weekly, rather than daily, basis. We believe that this modification, which will significantly reduce Eagle's level of effort associated with field measurement and recording, will still provide U.S. EPA with an effective representation of water elevation patterns in the HTDF.

Finally, Eagle is also requesting relief from the obligation to complete daily outfall observation on Christmas Day (12/25/13) and New Year's Day (1/1/14). The quality of this storm water discharge has been consistently good as demonstrated by visual observation and regular monitoring. As noted above, weather conditions necessitate continuous discharge of storm water from the HTDF to limit potential freezing and ice build-up in the receiving wetland. We are seeking this relief for the benefit of our employees responsible for this monitoring obligation.

Barring your objection, we are proposing to implement the changes outlined here effective December 20, 2013. Should you have questions regarding the information presented here please do not hesitate to contact me.

Sincerely,

Kristen Mariuzza

Kristen Mariuzza, P.E.
Manager, Environment and Permitting
Eagle Mine
4547 County Road 601
Champion, MI 49814, US

Direct: (906) 339-7075
Mobile: (906) 204-9392
Fax: (906) 339-7005
kristen.mariuzza@lundinmining.com
<http://www.eaglemine.com>
[@lundineaglemine](http://www.eaglemine.com)

Disclaimer: Eagle Mine is a subsidiary of Lundin Mining. The Information contained in this e-mail, including any attachments, may be privileged and is confidential, intended solely for the person(s) named above. Any other distribution, copying or disclosure is strictly prohibited. If you're not the intended recipient or have received this message in error please notify us immediately by replying to this email and permanently delete the original transmission from us, including all attachments without making a copy.